From: **Kelley Chase/R3/USEPA/US**
Sent: 4/12/2012 10:57:01 AM

To: Dawn Ioven/R3/USEPA/US@EPA
CC: johnson.eric@epa.gov; Lora Werner/R3/USEPA/US@EPA; Richard Fetzer/R3/USEPA/US@EPA
Subject: Re: Week 3 Sampling - Dimock

Hi Dawn -

Thanks for sending your initial findings. I am following up regarding the lithium data.

As you may recall, the initial analyses was run with a QL of 200 ug/L which is the R3 lab's routine reporting level. All samples were later re-analyzed with the lower level QL of 25 g/L. The results were recently submitted as a supplemental report. The data has been lab-validated and entered in Scribe. However, it is still being reviewed and is not considered final.

It is my understanding that once the re-analyzed lithium result data is finalized - a supplemental report will be provided to the residents noting the samples were re-analyzed with the lower 25 ug/L detection limit. As such - the week #3 final data packages to residents will include only the initial results at the 200 ug/L QL.

I am not certain how best to handle the supplemental data in terms of your review. Not sure if you are in the office - Rich is there today for a meeting. We should discuss this before you finalize your memos.

Thanks - Kelley

From: Dawn Ioven/R3/USEPA/US
To: Kelley Chase/R3/USEPA/US@EPA
Cc: Richard Fetzer/R3/USEPA/US@EPA, Lora Werner/R3/USEPA/US@EPA, johnson.eric@epa.gov
Date: 04/12/2012 10:30 AM
Subject: Week 3 Sampling - Dimock

Hi, Kelley. I reviewed the Validated Summary Reports for the 3rd round of homewell samples in Dimock. My preliminary findings are provided below; exceedances of triggers are highlighted in red. I will begin working on the draft memos for each homewell, and hope to provide these to you by COB today. Any questions, please give me a call.

The following locations had no exceedances of triggers: HW21, HW23, HW36, HW38, HW43, HW44, HW45, HW48, HW49, HW51, and HW54. Please note that HW47 had consistently elevated levels of arsenic (up to 91.1 ug/L at the tap); chronic exposure to the observed concentrations of arsenic would pose an excess cancer risk of approximately 2E-03. From the notes provided for this residence, it appears that RO treatment is present at this home, although no samples were collected post-RO. If the analytical findings are indicative of exposure point concentrations for HW47, either treatment to remove arsenic or an alternate water supply should be considered to eliminate the risks associated with exposure.

HW15a: **arsenic** = **5.1 ug/L** (HW15a), 4.3 ug/L (HW15a-F), 3.3 ug/L (HW15a-P), 2.8 ug/L (HW15a-PF)
trigger = 4.5 ug/L (at 1E-04), MCL = 10 ug/L

lithium = **32.3 ug/L** (HW15a), 29.1 ug/L (HW15a-F), **33.5 ug/L** (HW15a-P), **31.6 ug/L** (HW15a-PF)
trigger = 31 ug/L (at HQ = 1); ATSDR acute trigger = 1500 ug/L

sodium = 16,900 ug/L (HW15a), 16,200 ug/L (HW15a-F), **64,600 ug/L** (HW15a-P), **66,000 ug/L** (HW15a-PF)
non-enforceable drinking water standard for individuals on sodium-restricted diets = 20,000 ug/L

HW16: **barium** = **2910 ug/L** (HW16), 2870 ug/L (HW16-F), 2850 ug/L (HW16-P), 2860 ug/L (HW16-PF), 2890 ug/L (HW16z), **3040 ug/L** (HW16z-F)
trigger = 2900 ug/L (at HQ =1)

lithium = **103 ug/L** (HW16), **104 ug/L** (HW16-F), **100 ug/L** (HW16-P), **104 ug/L** (HW16-PF), **105 ug/L**

(HW16z), **102 ug/L** (H16z-F)
trigger = 31 ug/L (at HQ = 1); ATSDR acute trigger = 1500 ug/L

sodium = **50,200 ug/L** (HW16), **49,500 ug/L** (HW16-F), **50,200 ug/L** (HW16-P), **49,500 ug/L** (HW16-PF), **50,200 ug/L** (HW16z), **52,000 ug/L** (HW16z-F)
non-enforceable drinking water standard for individuals on sodium-restricted diets = 20,000 ug/L

HW22: **arsenic** = **7.1 ug/L** (HW22), 1 ug/L (HW22-F), 3.8 ug/L (HW22-P), 1.2 ug/L (HW22-PF)
trigger = 4.5 ug/L (at 1E-04), MCL = 10 ug/L

chromium = **4.9 ug/L** (HW22), ND (HW22-F), 2.5 ug/L (HW22-P), ND (HW22-PF)
trigger for Cr6+ = 3.1 ug/L (at 1E-04), trigger for Cr3+ = 16,000 ug/L (at HQ = 1), MCL = 100 ug/L (total Cr)

lead = **22.7 ug/L** (HW22), ND (HW22-F), 8.1 ug/L (HW22-P), ND (HW22-PF)
Action Level = 15 ug/L

manganese = **635 ug/L** (HW22), **361 ug/L** (HW22-F), **460 ug/L** (HW22-P), 313 ug/L (HW22-PF)
trigger = 320 ug/L (at HQ = 1)

HW30: **lithium** = 30.1 ug/L (HW30), 27.8 ug/L (HW30-F), **32.1 ug/L** (HW30-P), 29.8 ug/L (HW30-PF)
trigger = 31 ug/L (at HQ of 1); ATSDR acute trigger = 1500 ug/L

HW31: **lithium** = **41.5 ug/L** (HW31), **42.9 ug/L** (HW31-F), **43.8 ug/L** (HW31-P), **40.8 ug/L** (HW31-PF), **41.8 ug/L** (HW31z),**42 ug/L** (HW31z-F)
trigger = 31 ug/L (at HQ of 1); ATSDR acute trigger = 1500 ug/L

sodium = **26,700 ug/L** (HW31), **25,800 ug/L** (HW31-F), **25,500 ug/L** (HW31-P), **26,200 ug/L** (HW31-PF), **26,700 ug/L** (HW31z), **27,000 ug/L** (HW31z-F)
non-enforceable drinking water standard for individuals on sodium-restricted diets = 20,000 ug/L

HW47: **arsenic** = **90.7 ug/L** (HW47), **94.2 ug/L** (HW47-F), **91.1 ug/L** (HW47-P), **90.2 ug/L** (HW47-PF)
trigger = 4.5 ug/L (at 1E-04), MCL = 10 ug/L

lithium = **115 ug/L** (HW47), **128 ug/L** (HW47-F), ND (HW47-P), ND (HW47-PF)
trigger = 31 ug/L (at HQ of 1); ATSDR acute trigger = 1500 ug/L

manganese = **947 ug/L** (HW47), **877 ug/L** (HW47-F), ND (HW47-P), ND (HW47-PF)
trigger = 320 ug/L (at HQ = 1)

sodium = **53,600 ug/L** (HW47), **56,400 ug/L** (HW47-F), **93,900 ug/L** (HW47-P), **93,600 ug/L** (HW47-PF)
non-enforceable drinking water standard for individuals on sodium-restricted diets = 20,000 ug/L

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